

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB2005/050896

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06K9/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| X          | BOVIK, AL (EDITOR); JAIN, ANIL K.<br>(AUTHOR): "Handbook of Image and Video<br>Processing, Section 10.5 Fingerprint<br>Classification and Matching"<br>2000, ACADEMIC PRESS, SAN DIEGO, US<br>275840, XP002328913<br>ISBN: 0-12-119790-5<br>cited in the application<br>the whole document<br>-----<br>-/-- | 1-13                  |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- \*O\* document referring to an oral disclosure, use, exhibition or other means
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Date of the actual completion of the international search

25 May 2005

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03/06/2005

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International Application No

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |  |                       |
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| Category *   | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
| X  | JAIN A K ET AL: "An identity-authentication system using fingerprints"<br>PROCEEDINGS OF THE IEEE, IEEE. NEW YORK, US,<br>vol. 85, no. 9, September 1997 (1997-09),<br>pages 1365-1388, XP002261867<br>ISSN: 0018-9219<br>page 1369 - page 1373<br>page 1378 - page 1379<br>-----  | 1-13                  |
| X  | US 6 185 318 B1 (JAIN ANIL K ET AL)<br>6 February 2001 (2001-02-06)<br>the whole document<br>-----   | 1-13                  |
| A  | US 6 578 436 B1 (GANAPATHI SRINAVASAN K ET AL)<br>17 June 2003 (2003-06-17)<br>cited in the application<br>the whole document<br>-----   | 2,3,7,8,<br>10,11     |
| A  | EP 1 018 695 A (NIPPON TELEGRAPH AND TELEPHONE CORPORATION)<br>12 July 2000 (2000-07-12)<br>abstract; figures 26A-C,27,28<br>-----   | 1-13                  |
| A  | SHIGEMATSU S ET AL: "A SINGLE-CHIP FINGERPRINT SENSOR AND IDENTIFIER"<br>IEEE JOURNAL OF SOLID-STATE CIRCUITS, IEEE INC. NEW YORK, US,<br>vol. 34, no. 12, December 1999 (1999-12),<br>pages 1852-1859, XP001149326<br>ISSN: 0018-9200<br>the whole document<br>-----  | 1-13                  |
| A  | SHIGEMATSU S ET AL: "A 500dpi 224x256-pixel single-chip fingerprint identification LSI with pixel-parallel image enhancement and rotation schemes"<br>SOLID-STATE CIRCUITS CONFERENCE, 2002. DIGEST OF TECHNICAL PAPERS. 2002 IEEE INTERNATIONAL FEB 3-7, 2002, PISCATAWAY, NJ, USA, IEEE,<br>vol. 1, 2002, pages 354-473, XP010585603<br>ISBN: 0-7803-7335-9<br>the whole document<br>----- | 1-13                  |

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB2005/050896

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